

BTeV Project Management

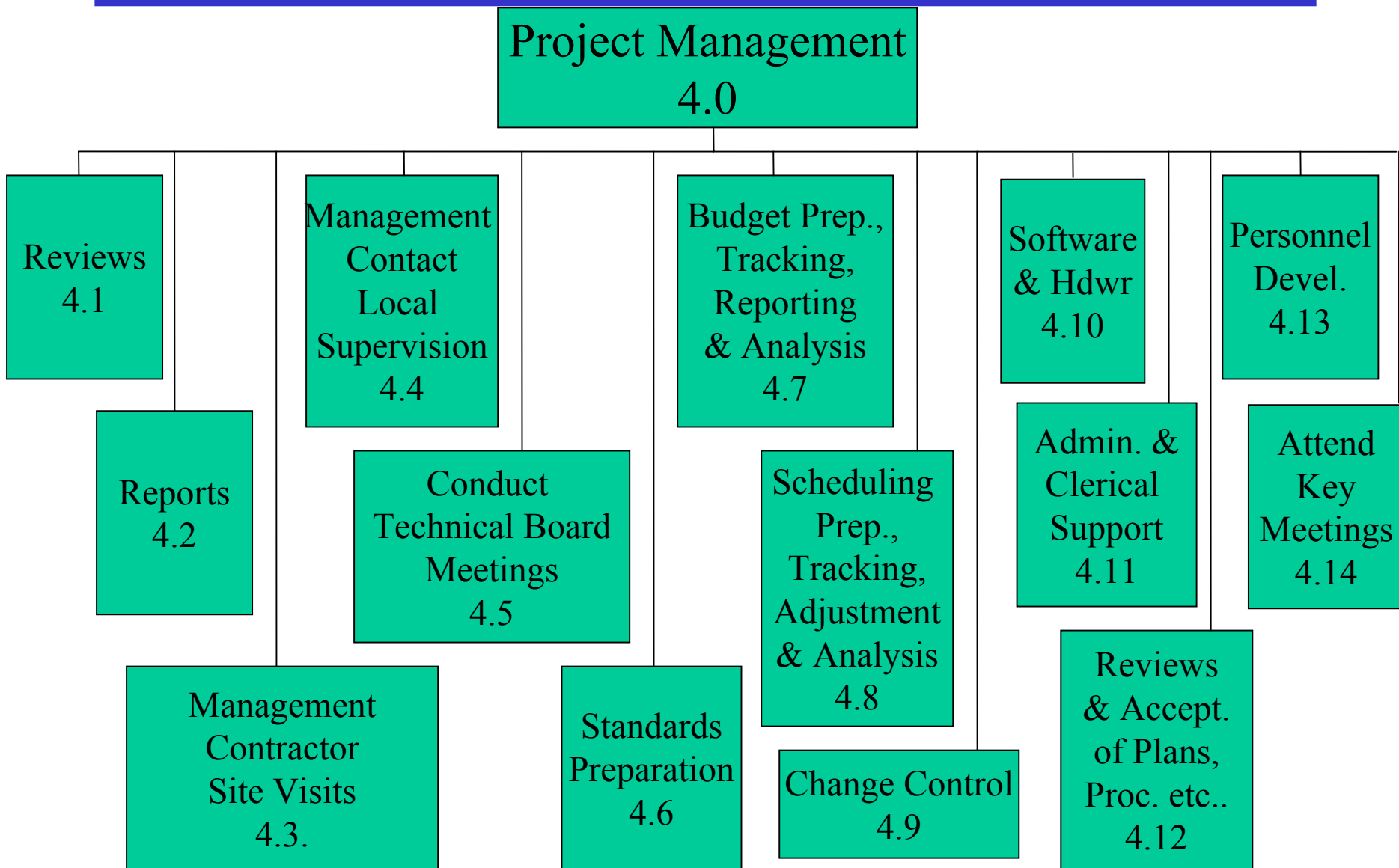
Joel Butler
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Temple Review
Breakout Session

- Level 2 Managers are responsible for the successful execution of their project and are key managers
- The Project Director and Project Manager, and his staff in the Project Office provide oversight and technical support and leadership and integration.

- Oversight/reporting
- Scheduling
- Budgeting
- Technical Assistance, problem resolution and coordination
- Resource allocation and redirection
- Management/leadership
- Control of scope changes, management of contingency
- Administrative support

- Can use a Top Down model - what skills and how many people with each skill are needed
- To develop a WBS for Project Management, we have "deconstructed" it into "tasks" for Bottoms Up approach
 - We then treated it just like any other project, with a task oriented WBS and Basis of Estimate
 - Basis is estimate is almost exclusively based on "experience" or actual practice
 - Did not worry about scheduling
- However, the key issue is the staffing level which results from the Bottoms up approach consistent with the result of the Top Down approach AND can we get that many people
- In the Bottoms Up approach, we leave time for actually going around and talking to people, solving problems, and finding out first hand what is going on

BTeV Project Management



~~BTeV~~ Co Project Office and Level 2 Project Staffing

- Project Office
- Project Directors: Joel Butler, Sheldon Stone
- Project Manager: about TBD
- Scheduler: Bill Freeman
- Budget Officer: hiring
- Project Electronic Engineer: Ed Barsotti
- Project Mechanical Engineer: Joe Howell
- Project Software Engineer: Margaret Votava
- Consultant: Bob Downing
- Integration Physicist (TBD)
- Administrative Support: Lory Curry
- Level 2 Project Managers
- 1.1 Chuck Brown
- 1.2 Simon Kwan
- 1.3 Marina Artuso
- 1.4 Yuichi Kubota
- 1.5 Paul Sheldon
- 1.6 Alan Hahn
- 1.7 Luigi Moroni
- 1.8 Erik Gottschalk
- 1.9 Klaus Honscheid, Margaret Votava
- 1.10 Joe Howell
- 2.0 Mike Church
- 3.0 Tom Lackowski

Most Level 3 Managers are also in place

- Advises the BTeV Project Manager and consists of
 - Level 2 Project managers
 - Project Office technical staff
 - Budget officer, Scheduler, Safety Officer
 - BTeV spokespersons and selected members of the BTeV collaboration

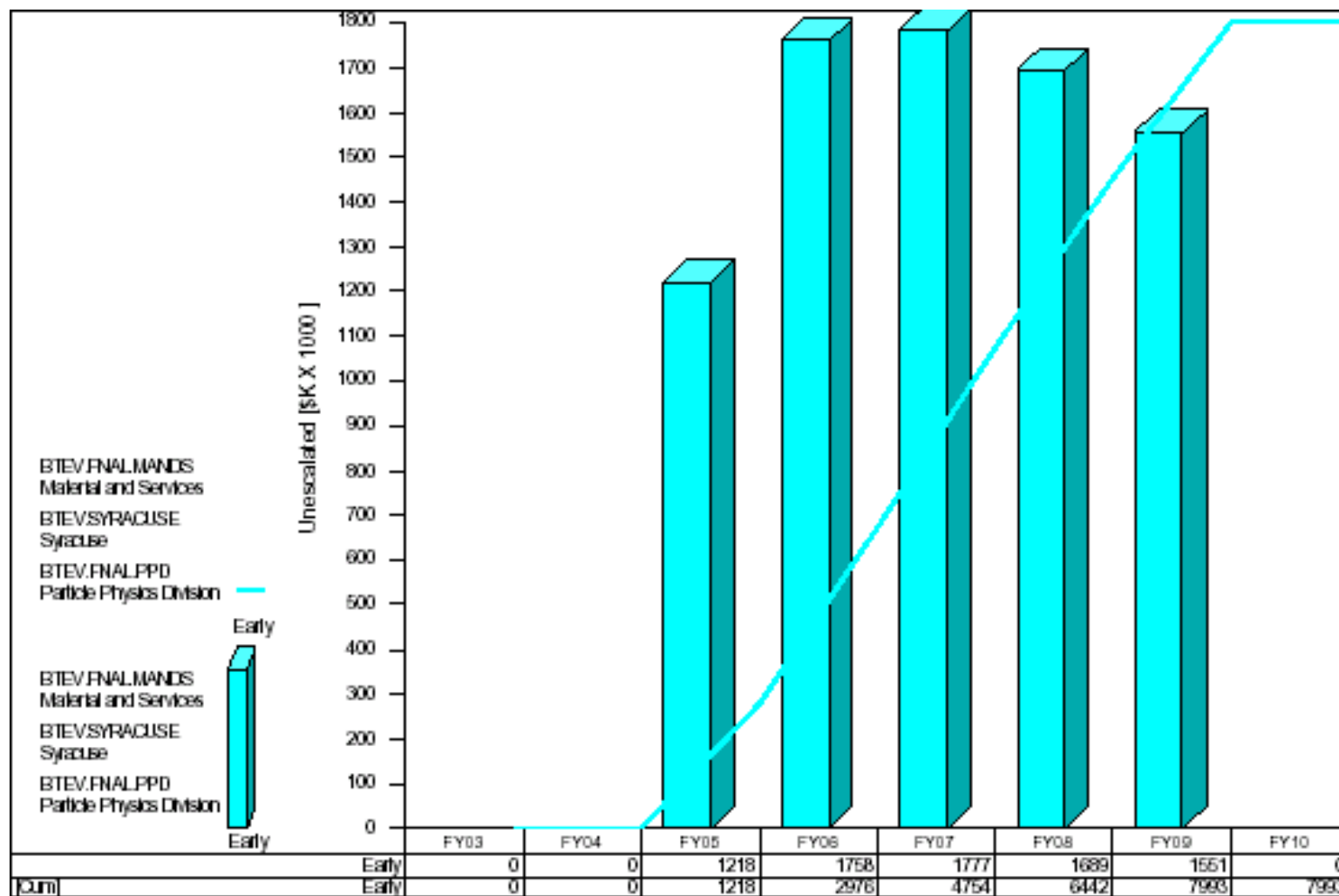
Technical Board makes recommendations to the Project Director and/or Manager

Technical Board has been meeting weekly

WBS 4.0 Cost with Contingency

Activity ID	Activity Description	Material & Services Cost	Labor Cost	Base Budget	Labor Contingency (\$)	Materials & Services Contingency (\$)	Total Budget (Base + Contingency)
CONSTRUCTION							
		\$582,066	\$7,411,047	\$7,993,114	\$1,748,134	\$128,133	\$9,869,382
1 -- Reviews							
		\$15,248	\$1,357,494	\$1,372,742	\$318,968	\$3,812	\$1,695,522
2 -- Reports							
		\$30,496	\$427,982	\$458,479	\$100,997	\$0	\$559,476
3 -- Management Contactor/Site Visits							
		\$0	\$441,883	\$441,883	\$104,695	\$0	\$546,579
4 -- Management Contact/Local Supervision							
		\$0	\$632,225	\$632,225	\$149,836	\$0	\$782,062
5 -- Conduct Technical Board Meetings							
		\$0	\$281,070	\$281,070	\$68,109	\$0	\$349,180
6 -- Stds Preparation							
		\$0	\$131,990	\$131,990	\$19,798	\$0	\$151,788
7 -- Budget Preparation, Tracking, Reporting & Analysis							
		\$0	\$493,391	\$493,391	\$116,429	\$0	\$609,820
8 -- Scheduling Prep/Tracking/Adjustment/Analysis							
		\$0	\$610,576	\$610,576	\$140,859	\$0	\$751,436
9 -- Change Control							
		\$0	\$528,557	\$528,557	\$127,854	\$0	\$656,411
10 -- Project Mgmt SW & Hdwe							
		\$331,041	\$137,119	\$468,161	\$32,096	\$82,760	\$583,018
11 -- Administrative & Clerical Support							
		\$166,244	\$358,532	\$524,777	\$86,278	\$41,561	\$652,616
12 -- Review & Accept of Plans/Procures, Etc.							
		\$39,035	\$923,416	\$962,452	\$225,177	\$0	\$1,187,629
13 -- Personnel Development							
		\$0	\$282,188	\$282,188	\$67,626	\$0	\$349,815
14 -- Attendance at Key Meetings							
		\$0	\$804,616	\$804,616	\$189,407	\$0	\$994,023
15 -- BTeV Project Management Milestones							
		\$0	\$0	\$0	\$0	\$0	\$0
16 -- Level 1 & Inter-Subproject Link Milestones							
		\$0	\$0	\$0	\$0	\$0	\$0

Cost vs FY



- They each have personnel in their project to provide for their management functions
- It seems to average about \$500K/L2 Project and totals to about \$5.5M for the project (detector only)
- This amounts to 1 FTE/L2 project/yr

The cost for the Project Management activity in WBS is \$10 M (FY05, includes ~25% contingency) and if You consider the ~\$5M in the Level 2 Subprojects, About 7.5% of the Project Cost goes to Management Activities

- Pursue linking of all tasks together **DONE!**
- Integrate the CO Conventional Construction into OpenPlan **DONE!**
- Eventually integrate CO IR into OpenPlan **DONE!**
- With the BTeV Scheduler
 - Begin to exploit the Scheduling and Critical Path Analysis aspects of OpenPlan **BEGUN!**
 - Implement the new lab cost profile and the newest schedule **ALWAYS BEING DONE**
- With the BTeV Budget Officer
 - Implement connection to COBRA **Waiting hiring of BTeV Budget Officer. Candidates are being interviewed**

- Conceptual Design Report
 - We have an integrated Conceptual Design Report that includes Detector, IR, and Conventional Construction
- Technical Design Report
 - For detector we have an >800 page DRAFT
 - It is missing "ES&H" section
 - We have to decide whether we want a cost and schedule section and, if so, how detailed it should be
 - We have to develop a similar level of design and documentation for the IR and CO Conventional Construction> They are at the stage of "Advanced CDRs" and will develop into full TDRs.

- We have a draft PMP which only covers the full project
- We have a draft PEP which has been adjusted to cover the full BTeV Project
- Each L2 project has its own Management Plan based on a template
- These form a reasonably complete, heirarchical set of management plans through Level 3 of the project

EXCEL Report on Document Status

	Critical Decision Prerequisites	Draft Start Date	Draft Completion Date	Target Completion Date	Date Completed	Date Approved	Current Status
CD-0	Justification of mission need document	May-03		Sep-03	est OCT 10	Feb. 16, 04	Done
	Acquisition Strategy	Jul-03	Sep-03	Nov-03			first draft
	Preconceptual Planning	Done					Done
	Mission Need Independent Project Review (P5)	Done	Sep-03	Sep-03		Sep-03	Done
CD-1	Conceptual Design Report	May-03	Aug-03	Jul-03			draft
	Preliminary Project Execution Plan and baseline range & Cost Estimates and Resource Loaded Schedule	Jul-03	Sep-03	Nov-03		N/A	Draft, needs revision
	Project Data Sheet for design	N/A		N/A	N/A	N/A	
	Verification of mission need (Lehman Review)	Dec-03					
	Preliminary Hazard Analysis Report & NEPA	Aug-03		Nov-03			
	PARS Reporting (EV System)	?		?			
CD-2							New draft submitted to Director's office
	Preliminary Project Management Plan (PMP)	Aug-03	Sep-03	Nov-03			
	Preliminary design		Oct-03				
	Review of contractor project management system						
	Final Project Execution Plan and performance baseline						
	Independent cost estimate						
	National Environmental Policy Act documentation						
	Project Data Sheet for construction	May-03			May-03		
	Draft Preliminary Safety Analysis Report						
	Performance Baseline External Independent Review						
	Final Project Management Plan (PMP)						

- We have a complete WBS for the Detector in OpenPlan, a fairly complete one for the Conventional Construction but it is not yet in OpenPlan. We have only a high level WBS for the IR
- Resource Loaded Cost and Schedule exists in OpenPlan only for the detector but we will integrate the other two projects into it, first the Conventional Construction and the IR when it advances farther in its design.

- CDO - Critical Mission Need. We have provided input to DOE, have received CD-0 and have the corresponding document
- ASP-Acquisition Strategy Plan - is in draft form and covers full project.
- A Draft Hazard Assessment Document is available
- NEPA - We received a Categorical Exclusion,